

LISTING OF CLAIMS

The following listing of claims will replace all prior versions, and listings of claims in the application:

1-37. (Canceled).

38. (Currently amended) A method to identify a compound that modulates a direct interaction between ~~one or more subunits of~~ a SWI/SNF chromatin remodeling complex and a nucleic acid regulatory protein zinc finger DNA binding domain peptide, the method comprising:

a) providing: ~~one or more subunits of~~

1) a SWI/SNF chromatin remodeling complex consisting of BRG1 and BAF155; and

2) a nucleic acid regulatory protein zinc finger DNA binding domain peptide that immunoprecipitates with the SWI/SNF chromatin remodeling complex;
under conditions that permit the direct interaction of ~~the one or more subunits of the~~ SWI/SNF chromatin remodeling complex and the zinc finger DNA binding domain peptide;

b) contacting with a test compound the zinc finger DNA binding domain peptide in direct interaction with the ~~one or more subunits of a~~ SWI/SNF chromatin remodeling complex; and

c) determining whether there is an increase or decrease in the direct interaction between ~~the one or more subunits of the~~ SWI/SNF chromatin remodeling complex and the zinc finger DNA binding domain peptide, wherein an increase or decrease identifies the test compound as a compound that modulates the direct interaction between ~~the one or more subunits of the~~ SWI/SNF chromatin remodeling complex and the zinc finger DNA binding domain peptide.

39. (Canceled).

40. (Previously presented) The method of claim 38, wherein the nucleic acid regulatory protein is a transcription factor.

41-53. (Canceled).

54. (Currently amended) The method of claim 38, wherein the ~~nucleic acid regulatory protein~~ zinc finger DNA binding domain peptide is ~~selected from the group consisting of~~ GATA-1, Spl, EKLF, FKLf, BKLf, GKLF, LKLF, Wilm's tumor suppressor protein (WT1), BRCA1, BRCA2, KRAB, BTB/POZ, Zif268, GLI, Xfin, a BTB/POZ domain containing zinc finger protein, PLZF (promyelocytic leukemia zinc finger), ~~and/or~~ a nuclear hormone receptor.

55. (Currently amended) The method of ~~claim 41~~ claim 54, wherein the zinc finger DNA binding domain peptide is from a nuclear hormone receptor.

56. (Previously presented) The method of claim 55, wherein the nuclear hormone receptor is selected from the group consisting of an androgen, estrogen, thyroid, progesterone, and glucocorticoid receptor.

57-62. (Canceled).

63. (Currently amended) A method to identify a compound that modulates chromatin remodeling of a specific DNA sequence within chromatin comprising:

a) providing chromatin assembled DNA containing a specific DNA sequence, which specific DNA sequence comprises a binding site for a zinc finger DNA binding domain peptide of a nucleic acid regulatory protein, which zinc finger DNA binding domain peptide immunoprecipitates with a SWI/SNF chromatin remodeling complex comprising BRG1;

b) contacting the chromatin assembled DNA with ~~one or more subunits of an~~
1) the SWI/SNF chromatin remodeling complex comprising BRG1, and
2) the zinc finger DNA binding domain peptide of the nucleic acid regulatory protein;
under conditions that permit the direct interaction of the SWI/SNF chromatin remodeling complex and the zinc finger DNA binding domain peptide; and

c) determining the level of chromatin remodeling in the presence and absence of a test compound; wherein a difference in the level of chromatin remodeling in the presence and absence of the test compound identifies the test compound as a compound that modulates chromatin remodeling of the specific DNA sequence within chromatin.

64. **(Previously presented)** The method of claim 63, wherein the specific DNA sequence is an individual gene or portion thereof, a regulatory region or a chromosomal region.

65. **(Canceled).**

66. **(Previously presented)** The method of claim 63, wherein the nucleic acid regulatory protein is a transcription factor.

67-71. **(Canceled).**

72. **(Currently amended)** The method of claim 63, wherein the SWI/SNF chromatin remodeling complex is E-RC1.

73. **(Canceled).**

74. **(Currently amended)** The method of claim 63, wherein the SWI/SNF chromatin remodeling complex ~~comprises~~ BRG1 and BAF155.

75-79. **(Canceled).**

80. **(Currently amended)** The method of claim 63, wherein the ~~nucleic acid regulatory protein~~ zinc finger DNA binding domain peptide is selected from the group consisting of GATA-1, Spl, EKLF, FKLf, BKLF, GKLF, LKLF, Wilm's tumor suppressor protein (WT1), BRCA1, BRCA2, KRAB, BTB/POZ, Zif268, GLI, Xfin, a BTB/POZ domain containing zinc finger protein, PLZF (promyelocytic leukemia zinc finger), ~~and/or~~ a nuclear hormone receptor.

81. **(Currently amended)** The method of claim 63, wherein the zinc finger DNA binding domain peptide is from a nuclear hormone receptor.

82. **(Previously presented)** The method of claim 81, wherein the nuclear hormone receptor is selected from the group consisting of an androgen, estrogen, thyroid, progesterone, and glucocorticoid receptor.

83. **(Currently amended)** The method of claim 63, wherein the zinc finger DNA binding domain peptide binds to a promoter, an enhancer, an insulator, a silencer, or locus of control regions (LCRs).

84. **(Previously presented)** The method of claim 63, wherein the test compound is a small molecule.

85. **(Previously presented)** The method of claim 63, wherein the test compound is a peptide.

86-87. **(Canceled).**

88. **(Previously presented)** The method of claim 63, wherein the amount of chromatin remodeling is determined by assaying for DNase hypersensitive sites within the specific DNA sequence.

89-99. **(Canceled).**

100. **(New)** The method of claim 38, wherein the zinc finger DNA binding domain peptide is from GATA-1, Spl, or EKLF.

101. **(New)** The method of claim 38, wherein the zinc finger DNA binding domain peptide is from GATA-1 or EKLF.

102. **(New)** The method of claim 38, wherein the zinc finger DNA binding domain peptide is from EKLF.

103. **(New)** The method of claim 63, wherein the zinc finger DNA binding domain peptide is from GATA-1, Spl, or EKLF.

104. **(New)** The method of claim 63, wherein the zinc finger DNA binding domain peptide is from GATA-1 or EKLF.

105. **(New)** The method of claim 63, wherein the zinc finger DNA binding domain peptide is from EKLF.